<u>Remarks</u>

Claims 1-6, 8-19, and 21-27 are currently pending, of which claims 1, 14, and 27 are independent. Claims 1, 2, 8-9, and 21-22 have been amended for clarity and to provide clearer antecedent basis. Reconsideration of the action mailed March 11, 2005, is respectfully requested in light of the foregoing amendments and the following remarks.

The Examiner rejected claims 1-6, 8-19, and 21-27 under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The Examiner rejected claims 1-6, 8-19, and 21-27 under 35 U.S.C. § 112, second paragraph, as being incomplete for omitting essential elements amounting to a gap between the elements. The Examiner rejected claims 1-6, 8-19, and 21-27 under 35 U.S.C. § 102(b) as being anticipated by Masahiko Muramatsu Japanese publication 06-020026 ("Muramatsu").

Section 112, First Paragraph Rejections

Claim 1 stands rejected as failing to comply with the written description requirement. The Examiner states that the claimed feature of "associating a reference character with each of the plurality of characters" is not disclosed by the specification. Applicant respectfully disagrees. The specification discloses the associating step at least on page 8, line 25 to page 9, line 2 of the specification. Specifically, the cited section of page 8 discloses a reference character as having the same dimensions and same font as the character C1. A reference character is determined for each additional character. *See* specification, page 10, lines 5-7. Additionally, FIG. 6D illustrates a reference character 22 positioned within the embox created for character 20. Thus, for each character there is a reference character having the same point dimension and font such that the reference character's bounding box can be positioned within the embox created for the character. Therefore, each character of the plurality of characters has an associated reference character.

The Examiner also states that the claimed feature of "using the associated reference character to determine a coordination point for each distinct embox" is not disclosed by the specification. Applicant respectfully disagrees. The specification discloses using the associated reference character at least on page 9, lines 6-20 of the specification. Specifically, the

cited section of page 9 discloses the reference character, or the reference character's bounding box, as being centrally positioned within the embox. *See* specification page 9, lines 6-9. The bounding box or edge of the reference character is then used to determine a new zero point of the embox. *See* specification, page 9, lines 9-11. The zero point of the embox can be the coordination point of the embox. *See* specification, page 9, lines 11-12. Therefore, the specification discloses using a reference character to determine a coordination point of an embox.

Furthermore, the Examiner states that the claimed feature of "aligning each distinct embox with a coordination line" is not described in the specification. Applicant respectfully disagrees. The specification discloses the aligning step at least on page 9, lines 21-25. Specifically, the specification states that a "coordination point is determined to be the corrected baseline (zero point) for embox 21 so that embox 21, and thus character 20, can be coordinated with the coordination line 23 for the text line." *See* specification, page 9, lines 22-24. Additionally, FIGS. 8A-8C illustrates emboxes aligned with a coordination line. Therefore, the specification discloses aligning each distinct embox with a coordination line.

Applicant respectfully submits that claim 1, as well as claims 2-6 and 8-13, which depend from claim 1, satisfy the written description requirement of section 112. Independent claims 14 and 27 include similar features as those rejected by the examiner in claim 1. Therefore claims 14-27 also satisfy the written description requirement of section 112 for at least the same reasons as claim 1.

Section 112, Second Paragraph Rejections

Claims 1, 14, and 27 stand rejected as omitting essential elements amounting to a gap between elements. Specifically, the Examiner states that the vertical and horizontal size of each embox being the same as the character dimensions is an omitted essential element. The Examiner states that the element is necessary to connect the features of determining the dimensions of each of a plurality of characters and associating a distinct embox with each of the plurality of characters. Applicant respectfully disagrees. An embox is clearly described in the specification as an outer frame demarcated by the vertical and horizontal dimensions (*e.g.*, point

dimensions) of a character. *See* specification page 7, line 26 to page 8, line 5. Each embox associated with a character of the plurality of characters has a size equal to the point dimensions of the associated character. Therefore, a specific recitation of the dimensions of each embox is not necessary to connect the recited features of claims 1, 14, and 27. However, in order to expedite prosecution, Applicant has amended claims to state that each embox has an outer frame demarcated by the dimensions of the associated character of the plurality of characters.

The Examiner further states that the feature of the reference characters having the same dimensions as the characters of the plurality of characters is an omitted essential element. Applicant has amended claims 1, 14, and 27 to recite each reference character as having the same font and dimensions as the associated character. Applicant respectfully submits that claims 1, 14, and 27, as amended, satisfy the requirements of § 112, second paragraph. The foregoing amendments to claims 1, 14, and 27 do not narrow the scope of the claims because they recite features already within the claims.

Claims 8 and 21 stand rejected as omitting essential elements amounting to a gap between elements. Specifically, the Examiner states that the step of setting a line height in claims 8 and 21 omit that the line height is set for the text line. Applicant has amended claims 8 and 21 to indicate that the line height is for the text line.

Additionally, the Examiner states that claims 8 and 21 omit essential elements regarding the aligning feature. The examiner states that the claim lacks the features of "coordinating the plurality of characters' individually determined reference points (coordination points) with the reference line (coordination line) for the text line, after which the characters are centrally positioned with regard to line height." Applicant respectfully disagrees. The additional features suggested by the Examiner are not essential elements of the invention, nor does the Examiner indicate what gap between elements the suggested features are required to fill. *See* MPEP § 2172.01. Applicant, however, has amended claims 8 and 21 for clarity. Claim 8, as amended, recites the aligning feature as "aligning the coordination point of each of the plurality of characters with a coordination line for the text line." Similarly, claim 21, as amended, recites "align the coordination point for each of the plurality of characters with a coordination line for

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the text line." Applicant respectfully submits that claims 8 and 21, as amended, satisfy the requirements of § 112, second paragraph.

Section 102 Rejections

Claim 1 stands rejected as anticipated by Muramatsu. Claim 1, as amended, recites a method for typesetting a line of text. The method includes using a reference character associated with each character of a plurality of characters to determine a coordination point for each distinct embox. For each character to be typeset, the reference character is positioned within the embox created for the associated character. The reference character has the same font and dimensions as the associated character. The reference character is then used to determine a coordination point for the embox. The coordination point for the embox is also the coordination point of the character for which the embox was created because the embox is defined for that character. Each embox, and thus each character within each embox, is then aligned with a coordination line using the coordination point for each of the characters. Subsequently, the plurality of characters are typeset on the text line.

The Examiner states that Muramatsu discloses Applicant's recited step of aligning each distinct embox with a coordination line using the determined coordination point for each of the plurality of characters at paragraphs 36-37. Applicant respectfully disagrees.

Muramatsu discloses techniques for correcting the position of Roman characters within an embox that has already been aligned. *See* paragraphs 8-9 and 11; FIGS 4, 11, and 12 (showing all emboxes aligned in a row both before and after repositioning of the characters within the emboxes). Muramatsu discloses a problem in which applying Roman characters in Japanese typesetting results in Roman characters having incorrect positions within the Japanese embox. *See* paragraphs 6-8 and 28; FIG. 4. The Roman characters must be repositioned within the embox in order to provide the correct typesetting layout. *See* paragraph 29.

Paragraphs 36-37 of Muramatsu disclose a part of the relocation operation to correct a position of a character in a line of text. In the example disclosed by Muramatsu, the character is a capital "A" which is not correctly aligned within the embox for proper typesetting. *See* paragraph 30; FIGS. 4-5. Specifically, FIG. 4 shows the "A" character as positioned in the lower

left corner of its embox. To correct the position of the "A" character, a bounding box is established for the character. *See* paragraph 32; FIG. 5a. The intersection of diagonal lines drawn from opposite corners of the bounding box define a center of gravity point for the character. *See* paragraph 33. The x position of the character is determined by comparing the distance from the edge of the embox to the center of gravity point in the bounding box with the x distance to the center point of the embox. *See* paragraph 35. If the x position of the center of gravity point is not equal to the x value of the center point of the embox, then the character is moved in the x direction until the x value is equal to the x value of the center of the embox. *See* paragraph 35; FIG. 5b.

Paragraphs 36-37 specifically disclose the second portion of the relocation operation following the correction in the x direction, namely the movement of the character in the y direction within the embox. The correct y position of the character is determined based in part on the characteristics of the character being moved. In this case the "A" character has a descender of zero, which means that the bottom of the bounding box of the "A" character rests on the baseline for the line of text when correctly typeset. *See* paragraph 36; FIG. 3-4. The "A" character is therefore moved in the y direction such that the bottom of the bounding box is along the predefined baseline. *See* paragraph 36-37; FIGS. 3, 4, and 5c. Muramatsu subsequently describes relocation operations for different types of characters which have different relationships between the bounding box and the baseline alignment. *See* paragraphs 40-46.

Paragraphs 36-37 fail to disclose or suggest aligning each embox with a coordination line using the determined coordination point for each of the plurality of characters. The emboxes are not aligned at all in Muramatsu. Each embox has a fixed position throughout the correction process disclosed in Muramatsu. For example, FIG. 11 illustrates a row of aligned emboxes, each embox having a character that is incorrectly positioned. FIG. 12 illustrates the corrected arrangement in which the characters have been repositioned within the emboxes; however, the emboxes have not changed position. Muramatsu only discloses alignment of a character <u>within an embox</u>, not an alignment of the embox.

Because the alignment of the emboxes never changes in Muramatsu, there is no disclosure or suggestion of aligning the emboxes with a coordination line using the coordination point for each of the plurality of characters. Furthermore, the relocation of the "A" character disclosed in paragraphs 36-37 does not involved a coordination point as recited in claim 1. The coordination point of claim 1 is determined using an associated reference character. Throughout the relocation process disclosed in Muramatsu, the actual character (*i.e.*, "A") is used. *See* FIGS. 4-5. Therefore, the coordination point used to relocate the "A" character, such as the center of the bounding box, is determined using the actual character and not a reference character associated with the character as required by claim 1.

The Examiner also states that paragraph 89 discloses the claimed aligning step. Applicant respectfully disagrees. Paragraph 89 discloses the same correction operation discussed above, but generalized for any character, not just the "A" character. Specifically, paragraph 89 discloses the movement magnitude in the X and Y direction in order to correct the position of the character. Again, the movement disclosed is only within the embox and does not involve any alignment of the embox itself to a coordination line. Applicant respectfully submits that claim 1, as well as claims 2-6 and 8-13, which depend from claim 1, are in condition for allowance. .

Claim 6 recites "determining a point on the glyph bounding box as the coordination point of each distinct embox." The Examiner states that Muramatsu discloses the recited feature at paragraph 33. Applicant respectfully disagrees. Paragraph 33 reads as follows:

> In detecting element 40, the center-of gravity location is detected from the bounding box information on a capital letter "A." Here, let the intersection of the diagonal line of a bounding box be a center-of gravity location. Specifically, a bounding box can express the point shown, respectively with the value of the point shown, respectively with the value of the light bearing in descended Rhine, and the value of left bearing, and the light bearing in ascender Rhine, and the value of left bearing in the rectangle field made into top-most vertices. Therefore, it can ask for the intersection of the diagonal line based on these values.

Additionally, the Examiner states that the coordination point is based on the bounding box of the "A" character. However, this is a coordination point for the "A" character only for aligning the character correctly within the embox. The coordination point for the "A" character

is not used for aligning the embox as required by claim 1. Additionally, the coordination point in Muramatsu is not determined using a reference character. A reference character is a character associated with the character, but is not the actual character. For example, a character may be an ideographic character that does not have bounding box information such that a reference character having bounding box information is needed to determine a coordination point. Muramatsu only discloses the use of the actual character for correcting the position of the character to be typeset. Applicant respectfully submits that claim 6 is in condition for allowance.

Claim 14, as amended, recites a computer program product including instructions to "align each distinct embox with the coordination line using the determined coordination point for each of the plurality of characters to typeset the plurality of characters on the text line." For the reasons set forth with respect to claim 1, claim 14 as well as claims x-x, which depend from claim 14, are in condition for allowance.

Claim 27, as amended, recites "aligning each distinct embox with the coordination line using the determined coordination point for each of the plurality of characters." For the reasons set forth with respect to claim 1, claim 27 is in condition for allowance.

Applicant respectfully requests that all pending claims be allowed. Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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Brian J. Gustafson
Reg. No. 52,978

Customer Number: 021876
Fish & Richardson P.C.
Telephone: (650) 839-5070
Facsimile: (650) 839-5071

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